ALASKA INDUSTRY COUNCIL MEETING
MINUTES
April 14, 2010

The Alaska Industry Council met at the Alaska DOT/PF Building on April 14, 2010 at 10:00 A.M.

The following agenda items were presented:

Introductions	Round Table
Opening Remarks	Jere Hayslett, FAA
WAAS Intelsat GEO (CRW) Outage Impacts	Leo Eldredge, FAA
Surveillance and Broadcast Services Update	Jere Hayslett, FAA
SBS Implementation brief	Wes Mooty, FAA
Information Sharing	All
Industry Feedback (Round Table)	All

Opening Remarks – Jere Hayslett

Jere Hayslett opened and chaired the meeting.

National ADS-B Update – Jere Hayslett

Jere presented an update on the ADS-B Key Sites as follows:

- **Essential Services**
  - Miami Area In Service Decision – November 2008√
- **Critical Services**
  - Louisville Initial Operating Capability (IOC) – November 2009√
  - Gulf of Mexico IOC –December 2009√
  - Philadelphia IOC – March 2010√
  - Juneau IOC – April 2010
  - In Service Decision – September 2010

Jere stated that the target date for Initial Operating Capability (IOC) of the Juneau Key Site is April 30th, however the FAA is working to have it completed a couple of days earlier. Once the In Service Decision has been reached in September, the FAA will have approval to turn on the rest of the stations in Alaska and the lower 48 for Critical Services.

The status of the Final Rulemaking activities is depicted on the chart below:

Milestone	Planned Date of Completion	Status / Comments
FAA Rulemaking Team finalizes RPR Phase 3	**January 14, 2009**	**Complete**
RPR Phase 3 Submitted to ARM	**January 21, 2009**	**Complete**
Rulemaking Council Approval of RPR	**January 27, 2009**	**Complete**
Rulemaking Team Drafts Final Rule	**May 2009**	**Complete**
Final Rule Economic Assessment	**August 2009**	**Complete**
Final Rule Concurrence through Directors	**October 2009**	**Complete**
Final Rule Concurrence through Associates	**November 2009**	**Complete**
Final Rule Concurrence through Administrator	**December 2009**	**Complete**
Final Rule Approved through OST	**February 2010**	**Complete**
Final Rule Approved through OMB	**April 2010**	
Final Rule Published in Federal Register	**April 2010 ***	

At this time the word from OMB is that the publishing of the final rule could roll over to May, but they will make every effort to work with the SBS office to meet the goal of an April publishing.

Jere announced that the FAA SBS office has hired Brian Durham as it's Implementation Manager for the Western Service Area. Brian will be working out of Seattle to help the SBS Office with outreach and the management of implementation activities for ADS-B in the Western Service Area.

Alaska Business Case Update:
Jere stated that because industry was not able to equip the required number of aircraft to trigger continued build out of ground infrastructure in some of the service volumes under the AIC agreement, the FAA has been working to rebuild its business case for ground deployment based on a more realistic look at *services* being provided by the operators in those service volumes. This will be in addition to hours being flown. By taking this approach ground service deployment will no longer be primarily based on equipped aircraft.

The example below using PenAir in SV 4, shows one such scenario.

- **Peninsula Airways (PenAir) carries 94% of the passengers in SV 4/327**
- **The PenAir fleet is currently ~37% equipped**
- **Below is the SV 4/327 business case scenario, if PenAir equips 100% of their SV 4/327 operations**

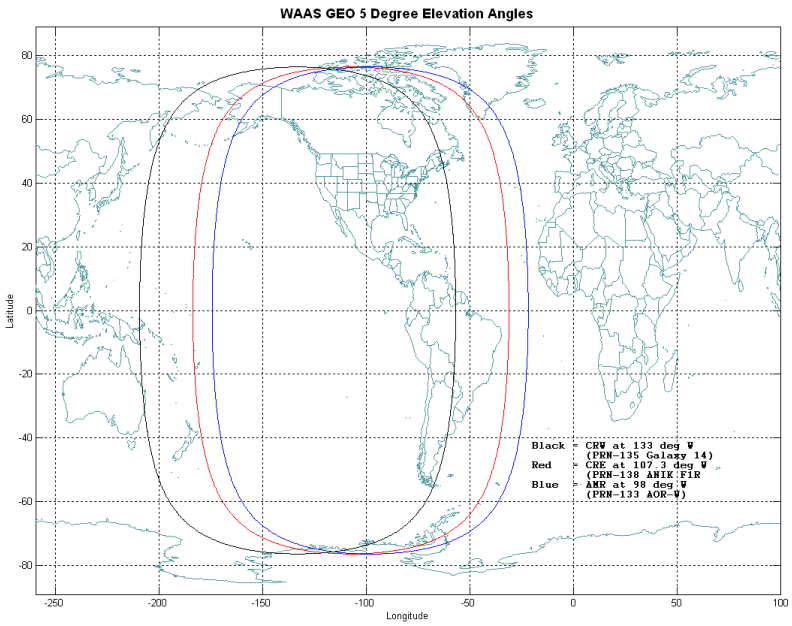
Scenario	Avionics Costs	Avionics Benefits	Avionics B/C Ratio	Ground station-related Costs	Ground station-related benefits	Ground station-related B/C Ratio	Total Costs	Total Benefits	Total B/C Ratio
Current (Penair 37% equipped, some other operators equipped)	$0.53	$2.39	4.5	$8.83	$5.82	0.7	$9.36	$8.22	0.9
Assume Penair 100% Equipped, no change to other operators	$1.41	$6.37	4.5	$8.83	$16.31	1.8	$10.24	$22.68	2.2
All SV operators 100% equipped	$3.26	$9.27	2.8	$8.83	$18.06	2.0	$12.08	$27.33	2.3

WAAS Intelsat GEO (CRW) Outage Impacts - Leo Eldredge

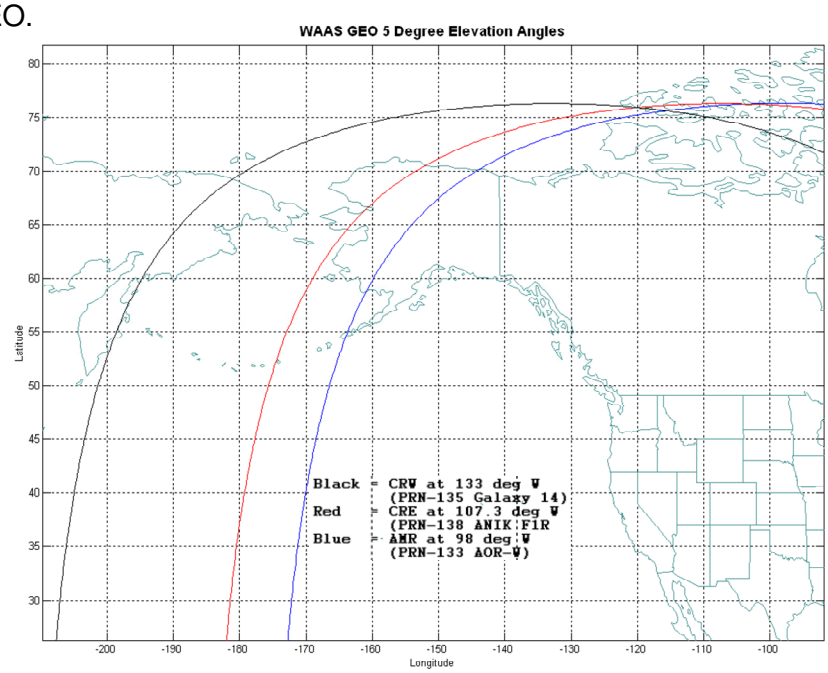
Issue

- **WAAS Currently Leases Two GEOs**
  - Intelsat (CRW) at 133 W
  - PanAmSat (CRE) at 107.3 W
- **Intelsat (CRW) TT&C Has Failed**
  - Provider Lost Ability to Control the GEO's Position on April 3rd
  - GEO Will Drift Out of Useable Orbit Over Next 2-4 Weeks
- **Loss of WAAS Service in NW Alaska is Imminent**
  - No Impact to LPV Service at the 16 Affected Airports
    - No LPV approaches published at these airports
  - LNAV Service Available Using GPS Only
  - Enroute/Terminal Service Including Q-Routes Available with Receiver Autonomous Integrity Monitoring (RAIM)
  - Users Will Need to Plan Around RAIM Availability
    - Requires a pre-flight RAIM prediction

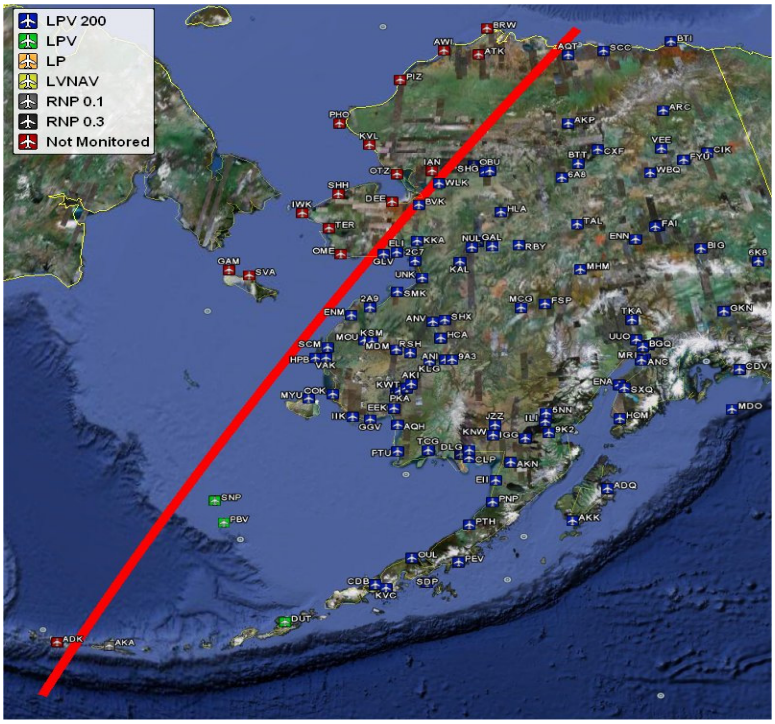
This first chart depicts current WAAS GEO Coverage.



The chart below shows what coverage is expected to be in Alaska without the Intelsat GEO.



The third chart is a goole map that shows what airports in Alaska will be affected. The airports in Red are the airports that will no longer have the WAAS GEO signal.



NAS Impacts

- **Users Outside the Affected Area Will Continue to Have LPV service**
- **Due to Lack of Redundant GEO Coverage, WAAS Users May Experience Temporary Service Interruptions**
  - If WAAS GEO Uplink Station (GUS) Switchovers Occur
    - Potential to Occur 3-5 Times per Year
  - Up to 5 Minutes May be Required to Restore LPV Service
- **Single Point Failure Situation Exists Until Redundancy Restored**
  - WAAS Team Integrating Gap Filler GEO (AMR) at this Time
  - Planned for December 2010

Mitagations

- **Investigate Integration of Inmarsat-III Pacific Ocean Region GEO**
  - Formerly used by WAAS Prior to Switching to Intelsat (CRW)
  - Lockheed Martin Working this with AJW-431
- **Accelerate Procurement of 5th GEO**
  - Will Replan Resources Saved from Loss of CRW
- **Publish Advisory NOTAM - Complete**
- **Publish Final NOTAM Prior to Loss of GEO**
  - Format and Content Being Coordinated with AFS
- **Investigate Accelerating Gap Filler GEO Integration**
  - Potential to Implement as Emergency Release

Next Steps

- Continue to Monitor GEO Performance
- Determine Date to Issue Final NOTAMs
- Continue Action Plans for Mitigations

<u>SBS Implementation brief – Wes Mooty</u>

AWOS

- **Shungnak**
  - Commissioned Dec ’09 – and has been approved.
- **Brevig Mission**
  - Permit approved – install at spring thaw
  - Power and Telco issues being worked – Power wants to go under ground and Telco wants to stay in the air, so the FAA is working to get the two to resolve that issue.
- **White Mountain**
  - Materials arrived at site
  - Installation to proceed at spring thaw
- **Noorvik & Shaktoolik**

- JAIs planned for April based on circuit availability

- **Elim**

Elim was a late addition – The FAA is still hoping to get the installation completed this year. There is a good chance commissioning will not be completed by the end of this fiscal year, but hopefully the ground work will be. Commissioning can be done in the winter, so the goal is to have all work completed by the end of this calendar year.

- 7460 complete
- Permitting and lease in process

Juneau WAM Status

IOC (Service to Anchorage Air Traffic) January 2010 - Complete

- Williams Mountain
  - Buildings, tower, solar arrays, propane, and power systems installed
  - AT&T not received FTA for telco link; no antennas or RF cable installed due to icing
  - Working alternate com solutions to keep power system operational over winter
  - Planning controlled facility cold soak to prevent unmonitored system failure

- Lynns Intersection
  - Buildings, tower, and solar arrays installed
  - Interconnecting power and propane systems to bring up site
  - Expediting antenna and RF cable install before tower is un-climbable due to weather

- Saddle Mountain
  - SOA wrapping up cable ladder and DC power system work in new building
  - TSSC crews in Juneau to support FAA equipment relocation and installation

Alaska ADS-B Essential Services

- **ITT systems currently installed at:**
  - Sisters Island – SV-178 -- Operational
  - AT&T Mile 11 – SV-178 -- Operational
  - Wrangell – SV-324 -- Testing phase
  - Pedro Dome – SV-328 -- Testing phase

- **ITT Installs to be completed in April/May:**
  - High Mountain – SV-324 -- 16 APR
  - Angoon – SV-324 -- 23 APR
  - Mt. Ripinski – SV-324 – 07 MAY
  - Gunnuk – SV-324 -- 07 MAY
  - Sunnahae – SV-324 -- 14 MAY
  - Cape Spencer – SV-324 – 04 JUNE
  - Cantwell – SV-329 -- 23 APR
  - Bethel – SV-333 – 14 MAY
  - Pt. Hope – SV-336 -- 14 MAY

Round Table

There were no comments for the Round Table Discussion and the meeting was adjourned at 11:55 AM.